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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
CHAN, RICHARD

ART UNIT	PAPER NUMBER
2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/699,639	FORCE ET AL.	
	Examiner	Art Unit	
	RICHARD CHAN	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/29/08*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *26-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-37 and 39-51* is/are rejected.

7)☒ Claim(s) *38* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 4/29/08 have been fully considered but they are not persuasive.

With respect to applicant's arguments regarding claim 26, the examiner disagrees with the applicant's submission of the Hladlik reference failing to disclose the claimed material of the instant application.

Regarding the antenna providing hemispheric coverage, the applicant submits that the Hladlik reference does not disclose a dish antenna which provides hemispherical coverage.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., without the need of dishes) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding applicant's arguments regarding the Hladlik does not disclose "a sync detect and demodulation unit apart from the demodulator in each of the channel processors."

The demodulator unit 86 within the receiver channel processor 58 provide a synchronization (Col.3 line 12-16).

Regarding applicant's arguments the Hladlik does not disclose a plurality of receiver channel processors.

The examiner however discloses wherein Fig.2 comprises a multiple receiver channels with 58, depending on the number of channels the splitter 78 outputs. Each channel containing a separate channel processor.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 46, 33, 36, 37, and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Hladik (US 5,734,962).

With respect to claim 26, Hladik discloses the receiver Fig.2 for use in receiving satellite broadcasts, comprising: a small antenna 72 providing nearly hemispherical coverage; a low noise amplifier 74 connected to amplify a signal received by the antenna 72; a sync detection step and demodulation unit 86 connected to recover timing signals from an amplified signal output by the low noise amplifier; (Col. 12 line 12-14) a plurality of receiver channel processors 58 connected to the low noise amplifier 74 and the sync detection and demodulation unit 86, each channel processor including a spread spectrum decoder, a demodulator, and an error correction decoder, for

recovering baseband signals. (Col.6 line 29-41)

With respect to claim 33, Hladik discloses the receiver as claimed in claim 26, wherein said amplifier includes a Field Effect Transistor.

With respect to claim 36, Hladik discloses the receiver as claimed in claim 26, wherein said sync detection and demodulation unit includes an active carrier tracking processor. (Col.6 line 29-41)

With respect to claim 37, Hladik discloses the receiver as claimed in claim 36, wherein said sync detection and demodulation unit 86 further includes a sync processor for detecting and demodulating a CW clock tone to generate a sync pulse. (Col.3 line 19-29)

With respect to claim 46, Hladik discloses the receiver as claimed in claim 26, further comprises a channel assembler 66 for assembling data packets output by the combiner if the satellite broadcast includes packetized data. (Col.4 line 7-10)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hladik (US 5,734,962) in view of Woodworth (US 4,876,737).

With respect to claim 27, The Hladik reference discloses the receiver as claimed in claim 26, however Hladik does not specifically disclose wherein said satellite broadcasts are C-band satellite broadcasts.

The Woodworth reference however discloses a satellite C-Band broadcasts. (Col.1 line 56-61)

It would have been obvious to one of ordinary skill in the art to one of ordinary skill in the art to implement C-Band broadcast as disclosed by Woodworth with the receiver of Hladik in order to operate in the C-Band.

6. Claims 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hladik (US 5,734,962) in view of Assal (US 4,931,802).

With respect to claim 28, Hladik discloses the receiver as claimed in claim 26, however the Hladik reference does not disclose the receiver capable of receiving and processing redundant signals that are time-delayed signals or signals broadcast by different satellites.

The Assal reference however discloses said redundant signals including one of a time-delayed redundant signal and a redundant signal received from a second satellite. (Col. 13 line 56- Col.14 line 2)

It would have been obvious to one of ordinary skill in the art to combine the time-delayed redundant signal as disclosed by Assal reference with the Hladik reference in order to properly sync signals.

With respect to claim 43, Hladik discloses the receiver as claimed in claim 26, wherein a first said receiver channel processor is used for a first primary data channel 58, a second said receiver channel processor is used for a second primary data channel, Fig.2 (Col.6 line 29-41)however the Ramberg reference does not specifically disclose a third said receiver channel processor is used for one of a time-delayed redundant signal and a signal received from a second satellite.

The Assal reference however discloses said redundant signals including one of a time-delayed redundant signal and a redundant signal received from a second satellite. (Col. 13 line 56- Col.14 line 2)

It would have been obvious to one of ordinary skill in the art to combine the time-delayed redundant signal as disclosed by Assal reference with the Hladik reference in order to properly sync signals.

7. Claims 29-32, 34, 35, 42, 44, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hladik (US 5,734,962).

With respect to claim 29, Ramberg discloses the receiver as claimed in claim 26, the examiner takes Official notice that said antenna is a phased array antenna.

With respect to claim 30, Ramberg discloses the receiver as claimed in claim 29, the examiner takes Official notice of said antenna is a conformal retrodirective phased array antenna.

With respect to claim 31, Ramberg discloses the receiver as claimed in claim 29, the examiner takes Official notice of said antenna is a square flat flexible panel.

With respect to claim 32, Ramberg discloses the receiver as claimed in claim 29, the examiner takes Official notice of said element in the phased array is a crossed dipole.

With respect to claim 34, Ramberg discloses the receiver as claimed in claim 33, the examiner takes Official Notice wherein said amplifier includes a High Mobility Electron Field Effect Transistor for at least one element of said antenna.

With respect to claim 35, Ramberg discloses the receiver as claimed in claim 34, the examiner takes Official Notice wherein said amplifier includes an Indium Gallium Arsenide High Mobility Electron Field Effect Transistor.

With respect to claim 42, Ramberg discloses the receiver as claimed in claim 26, the examiner takes Official Notice wherein a number of said channel processors is equal to a number of channels being received at any one time.

With respect to claim 44, Ramberg discloses the receiver as claimed in claim 26, the examiner takes Official Notice wherein at least one additional said receiver channel processor is used to process emergency or public service information.

With respect to claim 47, Ramberg discloses the receiver as claimed in claim 26, the examiner takes Official Notice wherein the receiver further comprising at least one processor selected from the group consisting of an audio format processor and a video format processor.

8. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hladik (US 5,734,962) in view of Fattouche (US 6,192,068).

With respect to claim 39, Hladik discloses the receiver as claimed in claim 26, however the Hladik reference does not specifically disclose wherein the spread

spectrum decoder is a Direct Sequence Spread Spectrum Code Division Multiple Access decoder.

The Fattouche reference discloses a DSSS system introduced to a CDMA system used for spreading. (Col.1 line 46-54)

It would have been obvious to one of ordinary skill in the art to implement a DSSS system for spreading the spectrum as disclosed by Fattouche with the Hladik reference in order to implement a specific spreading.

9. Claims 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hladik (US 5,734,962) in view Saegusa (US 6,198,914).

With respect to claim 48, Hladik discloses the receiver as claimed in claim 26, however does not specifically disclose wherein the receiver is further comprising a GPS receiver chip arranged to automatically update receiver geographic position so that when a broadcast of emergency or public service information is detected, regular operation of said receiver may be preempted if said receiver is within an area affected by said emergency or public service information.

The Saegusa reference however discloses an emergency call system wherein the GPS automatically updates the location in order to alert emergency officials when an emergency is detected. (Col.3 line 64-Col.5 line 9)

It would have been obvious to one of ordinary skill in the art to implement a GPS system to alert emergency call system in case an emergency is detected as disclosed by Saegusa with the Hladik receiver.

10. Claims 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hladik (US 5,734,962) in view of Woodworth (US 4,876,737) and in view Schmidt (US 4,985,707) and in view of Wright (US 6,466,569).

With respect to claim 49, Hladik discloses the receiver, comprising: a small antenna 100 providing nearly hemispherical coverage; a low noise amplifier 106 connected to amplify a signal received by the antenna 72; a sync detection 86 and demodulation unit 86 connected to recover timing signals from an amplified signal output by the low noise amplifier 74; and a plurality of receiver channel processors 58 connected to the low noise amplifier 74 and the sync detection and demodulation unit8 6, each channel processor 56 including a spread spectrum decoder, a demodulator, and an error correction unit, for recovering signals, (Col.6 line 29-41) however Hladik does not specifically disclose wherein said antenna is a conformal retrodirective phased array antenna and wherein the signals are baseband signals.

The Woodworth reference however discloses a satellite C-Band broadcasts. (Col.1 line 56-61)

It would have been obvious to one of ordinary skill in the art to one of ordinary skill in the art to implement C-Band broadcast as disclosed by Woodworth with the receiver of Hladik in order to operate in the C-Band.

The Schmidt reference however discloses a retrodirective phased antenna array. Fig.2

It would have been obvious to one of ordinary skill in the art to implement the retrodirective phased antenna as disclosed by Schmidt to the receiver of Hladik in order to implement a specific type of antenna.

The Wright reference Fig.2 discloses wherein a satellite receiver is able to encode and decode baseband signals with baseband unit 416.

It would have been obvious to one of ordinary skill in the art to implement the baseband processing unit as disclosed by Wright to the receiver of Hladik in order to process baseband signals.

11. Claims 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hladik (US 5,734,962) in view of Woodworth (US 4,876,737) in further view Assal (US 4,931,802) and in view of Wright (US 6,466,569).

With respect to claim 50, Hladik discloses the receiver comprising: a small antenna 72 providing nearly hemispherical coverage; a low noise amplifier 74 connected to amplify a signal received by the antenna; a sync detection and demodulation unit 86 connected to recover timing signals from an amplified signal

output by the low noise amplifier 74; and a plurality of receiver channel processors 58 connected to the low noise amplifier 74 and the sync detection and demodulation unit 58, each channel processor 58 including a spread spectrum decoder, a demodulator, and an error correction unit, for recovering signals(Col.6 line 29-41), wherein a first said receiver channel processor 58 is used for a first primary data channel, a second said receiver channel processor is used for a second primary data channel however the Hladik reference does not specifically disclose a third said receiver channel processor is used for one of a time-delayed redundant signal and a signal received from a second satellite or when the receiver operates with the C-Band frequency.

The Assal reference however discloses said redundant signals including one of a time-delayed redundant signal and a redundant signal received from a second satellite. (Col. 13 line 56- Col.14 line 2)

It would have been obvious to one of ordinary skill in the art to combine the time-delayed redundant signal as disclosed by Assal reference with the Ramberg reference in order to properly sync signals.

The Woodworth reference however discloses a satellite C-Band broadcasts. (Col.1 line 56-61)

It would have been obvious to one of ordinary skill in the art to one of ordinary skill in the art to implement C-Band broadcast as disclosed by Ramberg with the receiver of Ramberg in order to operate in the C-Band.

The Wright reference Fig.2 discloses wherein a satellite receiver is able to encode and decode baseband signals with baseband unit 416.

It would have been obvious to one of ordinary skill in the art to implement the baseband processing unit as disclosed by Wright to the receiver of Hladik in order to process baseband signals.

12. Claims 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hladik (US 5,734,962) in view of Woodworth (US 4,876,737) in further view Assal (US 4,931,802) and in view of Wright (US 6,466,569) in view Saegusa (US 6,198,914).

With respect to claim 51, Ramberg, Woodworth, Wright and Assal combined disclose the receiver as claimed in claim 50, however the four references do not specifically disclose wherein at least one additional said receiver channel processor is used to process emergency or public service information.

The Saegusa reference however discloses an emergency call system wherein the GPS automatically updates the location in order to alert emergency officials when an emergency is detected. (Col.3 line 64-Col.5 line 9)

It would have been obvious to one of ordinary skill in the art to implement a GPS system to alert emergency call system in case an emergency is detected as disclosed by Saegusa with the Ramberg, Woodworth, Wright and Assal receiver.

Allowable Subject Matter

13. Claim 38 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claim 38, the prior art does not specifically disclose the receiver as claimed in claim 36, wherein one said sync processor processes a sync signal for a primary transponder, and a second said sync processor processes a sync signal for an unsynchronized second transponder on the same or another satellite.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD CHAN whose telephone number is (571)272-0570. The examiner can normally be reached on Mon - Fri (9AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard Chan/
Examiner, Art Unit 2618

/Nay A. Maung/
Supervisory Patent Examiner, Art Unit 2618